

tions 4,8,9,14,18,23,29,30,31 found at autopsy in patients dying of trichinosis, reporting pathological evidence of toxic changes in the kidneys, heart, meninges, and brain, in which organs no trichinae were found. These toxic changes are therefore a non-specific manifestation because they occur in tissue in which no trichinae are present. As these non-specific toxic changes do occur in the above tissue, it is reasonable to believe that they could also occur in the tissues around the eyes and thereby serve as the basis by which to explain edema of the eyelids, rather than the commonly held view that the edema is due to the presence of trichinae in the extra-ocular muscles. This view would be proved if it could be demonstrated that edema of the eyelids occurred in proven cases of trichinosis in which no trichinae were found at autopsy in the extra-ocular muscles or in the tissues around the eyes, and if no other causes of the edema could be demonstrated.

It appears that the cause of edema of the eyelid in patients who have trichinosis has not been satisfactorily explained.

In the study reported here, two patients who had trichinosis were found to have the extra-ocular and other skeletal muscles heavily infested with trichinae. In none of these patients was edema of the eyelids observed before death, according to their hospital records. In six of the eleven bodies studied trichinae were demonstrated. Undoubtedly,³ less discrimination is practiced among this group of charity patients in the selection and preparation of their diet than is practiced by the population at large, which factor may help explain the high incidence. However, this group is too small from which to draw any conclusion regarding a true incidence.

CONCLUSIONS

1. The commonly held view that "edema of the eyelids in trichinosis is due to the presence of trichinae in the extra-ocular muscles" lacks sufficient supportive evidence to date and must therefore be considered an assumption.
2. The concept is advanced that the edema of the eyelids as it occurs in trichinosis may be principally a non-specific toxic manifestation and not entirely due to the presence of trichinae in the extra-ocular muscles or tissues around the eyes.
3. Two instances of extra-ocular-muscle trichinosis occurring in the eleven unselected patients investigated are reported and illustrated.
4. Trichinae were demonstrated in six of the eleven bodies studied.
5. In none of these patients had there been recorded clinical symptoms of trichinosis.

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PSYCHIATRIC CASUALTIES*

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THE large percentage of psychiatric casualties in the Armed Forces is a matter of common knowledge. It is apparent that they serve the enemy's ends as effectively as do the casualties resulting from physical injury or infection. It is perhaps not so well known that military psychiatric casualties are not limited to personnel with combat experience.

In civilian life psychiatric casualties occur both as the result of direct enemy action (such as has been experienced by our Allies but not, as yet, by us in continental United States), and in the absence of an emergency, but related to war-time conditions. The recognition and treatment of the latter casualties constitute a valuable contribution that civilian psychiatrists can make to the war effort today. This would be a contribution not only towards military victory, but towards minimizing the detrimental effects of war conditions upon the population as a whole. However, this paper is restricted to a consideration of emergency treatment of psychiatric casualties resulting from enemy action against the civilian population.

Civilian psychiatric casualties are of great value to the enemy. One has only to recall recent incidents of blocked roads preventing troop movements and the desertion of vital defense posts, such as those charged with keeping open the lines of communication and transportation, to realize the importance panic can play in the defeat of a nation. To avoid such mass reactions each civilian should be informed of the danger of attack, the anticipated nature of the attack, the defense plans that have been made, and the duties he will be

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asked to perform. All Air Raid Wardens and officers should be given a brief summary of the problem of psychiatric casualties. This should be an informative outline describing in easily understood terms the causes of such casualties, the types expected, their prophylaxis and first aid treatment. Such a pamphlet has been issued in San Francisco by the Office of Civilian Defense.

It should be emphasized that emotional manifestations are normal when an individual is exposed to danger. Such reactions are only considered abnormal when they are out of proportion to the situation and exhibit, for the person, a departure from his habitual (adequately adaptive) reaction pattern. They may render him inadequate to perform his duties, to care for himself and others, or result in him being a nuisance or actual danger to himself and others. If incapacity cannot be accounted for on physical grounds, the patient should be labeled, tentatively, a psychiatric casualty and detained at a first aid station until transportation facilities are available to a hospital where a psychiatric clearance can be obtained before the patient is dismissed. The mistake should not be made of saying that the patient is harmless; therefore, he can be cared for by his relatives. It is precisely this type of patient returning to work suffering from untreated psychopathology, precipitated by danger, who is responsible for fatal accidents with resultant loss of many lives and man hours of work in vital industries. In addition, psychiatric casualties should be isolated because of their infectious nature, and the detrimental effect they have on the morale and efficiency of associates.

Since it is unlikely that a sufficient number of specialists in psychiatry will be available to treat all psychiatric casualties, each physician should be prepared to care for them. The first question he should ask himself is: "Is this patient a psychiatric casualty, and, if so, why did he become one?" The physician must know that if the reaction is out of proportion to the situation, *it is so because of unconscious processes, of which the patient is unaware*. A tactful physician often can obtain a sufficient understanding of these processes to enable him to remove the symptoms in a short period of time. These symptoms should be observed carefully, and thought of as the language by means of which the patient expresses his reaction to *insecurity*; either by flight from it and/or denial of its existence shown by inhibition of activity (apathy, disabling symptoms, amnesia, etc., to coma), or by excessive action due to anxiety or a failure to repress his aroused aggressions (officiousness, belligerency, etc., to mania).

Under emergency conditions attempts at formal classification of reaction types according to some system of psychiatric nomenclature is unnecessary, and often confuses the non-psychiatric examiner, and limits his effectiveness as a therapist.

A complete physical examination is necessary in order to discover any physical injury or illness which may be masked by the psychiatric manifestations. Frequently the presenting symp-

toms of some conditions, such as cerebral concussion, are psychiatric in nature. Much of the history-taking, psychiatric examination and treatment will be done in conjunction with this physical examination.

A physician cannot approach a psychiatric case with the idea that he can separate his examination, diagnosis, formulation of his plan of therapy and prescription of his treatment. He must be aware that all these factors progress simultaneously from the moment of his first contact with his patient.

The manner of the examiner and the emphasis he places upon questions and parts of the physical examination amount to profound suggestion in the psychotherapy of the patient. Observation of the patient's reactions during the examination, while he recounts his past and family history, and answers questions regarding his family, friends, co-workers, religious affiliations, occupation and damage done to his home or self, will enable the physician to determine what constitutes *security* for this individual.

The physician, by his manner of calm realistic acceptance of the fact that danger exists, that it is being met, and that the patient is in a place of relative safety (because the physician himself and his assistants exhibit no tension), will supply all the assurance that is necessary in a large percentage of cases to obtain a satisfactory history.

If the patient senses the physician's haste (because he has a long list of patients yet to see) the examination might as well be omitted, and certainly should be postponed. One must accept the fact that in psychiatric casualties time must be spent on each patient, and the physician must exhibit an unhurried atmosphere of confidence and courage.

It is of value to be the first person to interview the patient. The exhibition of an interested, sympathetic willingness to listen and try to help gives the patient a sense of security, forming the basis of a confidence which often enables the patient to talk freely.

Patients must be made to feel that the doctor is on their side. It will do no good to assume a hostile attitude demanding coöperation, or attempt to shame patients by comparison with others, or try to appeal to their civic sense and patriotism. A critical attitude will not help. In fact, in many patients it will increase the disability, or perhaps change a somewhat violent, though readily-treated case into a quiet one requiring months or years to cure. These patients are already suffering from guilt because of their fears. To some degree their symptoms are designed (unconsciously) to relieve unbearable feelings of guilt and shame. Reassurance should be given that fear is normal and justified.

Disapproval of the patient should not be expressed by word, manner or deed. Humor, even though well meant, i.e. "to cheer him up," should not be employed. The patient may interpret it as ridicule.

One must bear in mind constantly that the patients are suffering from results of *unconscious mechanisms*. Their symptoms often appear automatically without the patient having the least idea of their mode of development or existence. When one is bewildered, caught in a trap of unconscious conflicts, it is useless to urge him to have self-control, to pull himself together and be reasonable. It will only do harm to tell him that his trouble is imaginary. It is the physician's duty to discover the underlying fears of which the patient is unaware, and to alleviate them as much as possible. Then the symptoms will diminish.

It is enough that the physician understands with what the individual is struggling, imagines himself in his patient's situation and directs his psychotherapy to supply the patient's needs. *Interpretations should not be given to the patient*. He is seeking security, not an explanation of why he is emotionally ill. Nurses, social-service workers, and occupational therapists play an important part in the psychotherapy. Rest, good food, and outlets for energy must be supplied.

Those patients who do not respond sufficiently to warrant prolonged psychotherapy during the first interview should be given as comfortable quarters as possible, and put to sleep with sedatives as required. It is desirable to arrange the next interview with the patient as soon as possible after he has awakened.

If treatment is instituted within twenty-four hours of the onset of symptoms, before crystallization of the reaction pattern has taken place, a minimal amount of disability results; usually a large percentage of such patients can be dismissed in a few days to return to their jobs. However, they should report to some psychiatrist for follow-up and such prophylactic treatment as is necessary to avoid a recurrence when subjected to strain at some future date. The study and therapy of the small percentage who do not respond to the emergency treatment outlined above will be handled best by trained psychiatrists. These patients fall outside of the group dealt with in this paper.

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National Foundation for Infantile Paralysis, Inc.

The encouraging news that "some of the mystery of infantile paralysis is being dispelled" is contained in the annual report of The National Foundation for Infantile Paralysis, made public recently by Basil O'Connor, its president.

Listing grants and appropriations totaling \$1,828,859 authorized by the National Foundation between Sept. 30, 1943, and May 31, 1944, for research, education and the training of physical therapists, the present report covers only an eight months period because of a change in the fiscal year. Future annual reports will cover operations from June 1 to May 31.

The report also contains the information that a special fund of \$2,000,000 for Epidemic Aid and Other Emergencies has been established by the trustees, as of May 31, 1944, and that last summer's epidemic—the second worst outbreak of poliomyelitis in the history of the United States—drew upon the newly created fund

to the extent of \$739,860. This expenditure, between June 1 and October 31, 1944, while outside the fiscal period covered by the annual report is mentioned in it as demonstrating the necessity for the establishment of a special fund "for such unforeseen epidemics and other emergencies." The \$739,860 of National Foundation funds used to supplement chapter funds in local communities hard hit by the 1944 outbreak.

During the eight months covered by the fiscal report, the National Headquarters received \$5,191,148 as its share of the 1944 March of Dimes appeal, an additional \$5,293,232 remaining with the National Foundation's county chapters. Receipts from other sources, including \$240,000 donated by the producer of the motion picture "Forever and a Day," increased the total income of the National Foundation for the fiscal period to \$5,452,593.

That part of the report dealing with research into the nature of the disease is based largely on findings made during 1943, when the number of cases reported, 12,429, exceeded all previous years except 1916 and 1931. . . .

Of the 1943 outbreak, the report has this to say:

"Particularly were extensive investigations conducted in California, Texas, Illinois, and Connecticut. Here workers were able to live in the field with the epidemic. The pattern of spread of cases was investigated. Thousands of specimens were collected in accordance with a carefully pre-arranged plan. Bodily secretions and blood specimens were secured from patients and their contacts. Material was collected from the environment in which these persons lived.

"Wild and domestic animals and birds were studied. Particular attention was given to rodents and animals with any evidence of disease. Large numbers of these were trapped and sent to the laboratories. Food, water, sewage—all were collected.

"The examination of all this material calls for months of study. The laboratory procedures involved are difficult and expensive. They call for the use of high speed and ultra-centrifuges, for monkeys, and above all, skilled and trained laboratory workers.

"Much has been learned from this epidemic. The method of spread of the disease is better understood. Some of the mystery of infantile paralysis is being dispelled. But not enough has yet been learned to set into operation practical control measures. More epidemics need be studied; laboratory methods must be greatly improved before the final answer can be given. . . .

"In seeking improved methods of treatment, it has been necessary to study other diseases," the report states. "The effects of drugs have been studied, not so much by observing their action on infantile paralysis in man, but rather in testing them in laboratory animals infected with similar disease-producing viruses."

"Grants have been made to include studies of other viruses and virus diseases so that the facts learned would both increase the knowledge and develop better methods of study and treatment of infantile paralysis."

Frédéric Chopin (1810-1849).—He was anemic and tuberculous, and it has been said that the taint of disease permeates Chopin's music. But he was indeed "poet of the piano." Once, stopping at an inn for a change of horses, he found a piano in tune and began to improvise. An audience gathered. When he stopped, the caretaker promised him courier horses if only he would play a while longer. Chopin, even when wracked by cough, seemed to lose all exhaustion while playing.—Warner's *Calendar of Medical History*.